# SITE ASSESSMENT REPORT
# FOR
# GHR FOUNDRY SITE
# DAYTON, MONTGOMERY COUNTY, OHIO
# TDD: S05-9604-004
# PAN: 6A0401SIXX

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International Specialists in the Environment

**SITE ASSESSMENT REPORT**
**FOR**
**GHR FOUNDRY SITE**
**DAYTON, MONTGOMERY COUNTY, OHIO**
**TDD: S05-9604-004**
**PAN: 6A0401SIXX**

**AUGUST 26, 1996**

**Prepared for:**

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**
**Emergency Response Branch**
**77 West Jackson Boulevard**
**Chicago, Illinois 60604**

Prepared by: _____ Date: 8/26/96
Larry Lueck, START Project Manager

Reviewed by: _____ Date: 8/26/96
M.J. Ripp, Assistant START Program Manager

Approved by: _____ Date: 8/26/96
Thomas Kouris, START Program Manager

## TABLE OF CONTENTS

## LIST OF ILLUSTRATIONS

## LIST OF TABLES

# 1. INTRODUCTION

The United States Environmental Protection Agency (U.S. EPA) tasked the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E), under Technical Direction Document (TDD) S05-9604-004 to assess site conditions and potential threats to human health and the environment at the GHR Foundry site, located in Dayton, Montgomery County, Ohio. The Ohio Environmental Protection Agency (OEPA) requested the assistance of U.S. EPA in assessing site conditions at this abandoned site. The site assessment was conducted on April 10, 1996.

# 2. BACKGROUND

## 2.1 SITE DESCRIPTION

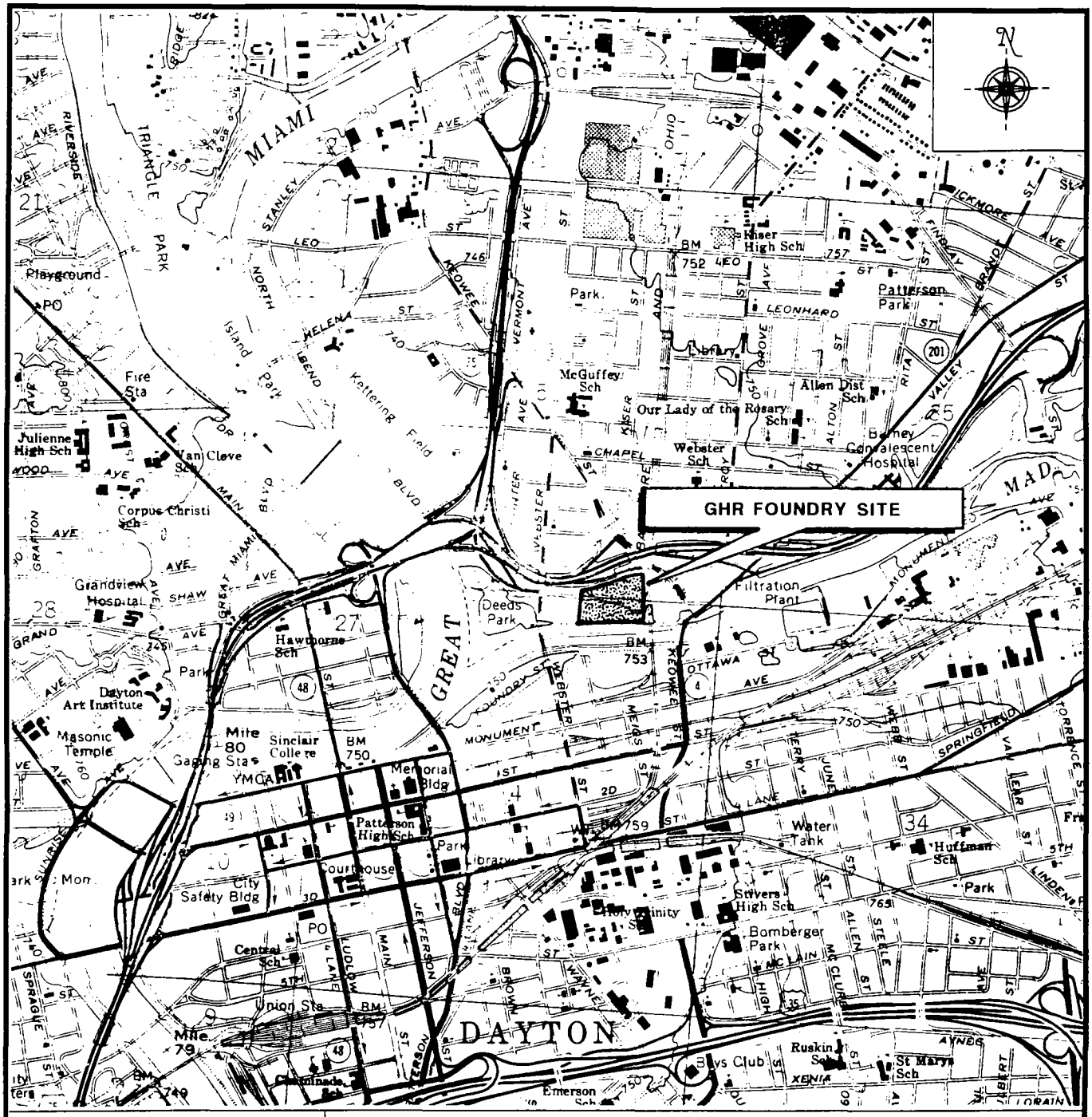
The GHR Foundry site is an inactive, abandoned industrial property of 11.8 acres located at 400 Detrick Street in an industrial/commercial section of Dayton, Montgomery County, Ohio. Located at latitude 39° 46' 10" N, longitude 84° 10' 53" W (Figure 2-1), the site is bounded on the north by a ditch and State Route 4, on the east by tracks of the Baltimore and Ohio Railroad, on the south by the Mad River, and on the west by an active business separated from the site by an alley.

During the April 10, 1996, U.S. EPA site assessment, five remaining structures were observed on the site: an unoccupied gate house by the front gate; a brick building, in good condition, located approximately 50 feet inside the front gate and adjacent to the site access road; a partially demolished two-story concrete building located approximately 100 yards east of the brick building; and two silos located immediately inside the eastern site fence (Appendix A).

The remainder of the site is covered with building rubble and foundations of former buildings. At the time of the site assessment, a bulldozer was leveling piles of soil over the southwest portion of the site, and filling several foundations and other subsurface structures. This soil was clean fill that was brought to the site by a road-building contractor. A chain-link fence complete-ly enclosed the site at one time, but now the west fence and part of the south fence are missing, and the front gate is unsecured. Numerous persons were observed scavenging scrap and equipment from the site. On the south side, a grassy berm separates the site from the bank of the Mad River. A 24-inch outfall, partially plugged with soil and dead vegetation, penetrates this berm from the southeast corner of the site to the slope of the river bank.

## 2.2 SITE HISTORY

The only available site history consists of an OEPA interoffice memorandum, a copy of which




QUADRANGLE LOCATION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33 N. Dearborn Street, Chicago, Illinois 60602

| | | |
|---|---|---|
| TITLE: Site Location Map | | FIGURE #: 2-1 |
| SITE: GHR Foundry Site | | SCALE: 1:24,000 |
| CITY: Dayton | STATE: Ohio | TDD: S05-9604-004 |
| SOURCE: U.S.G.S. Topographic Map, 7.5' Series Dayton North, Ohio Quadrangle | | DATE: 1965 REVISED: 1981 |

was transmitted to U.S. EPA with OEPA's request for assistance at the site, and certain information gathered by the On-Scene Coordinator (OSC) and START from conversations with OEPA officials.

Foundry operations ceased in 1983. The present owners purchased the property in 1989. Montgomery County tax records for 1994 indicate that the property is owned by the Ohio Industrial Trading Company; Ray Carcione is the President. A 1991 compliance inspection by OEPA indicated that another partial owner was John Paul Enterprises; John Peloquin is the President. A business card lists the address of John Paul Enterprises as 400 Detrick Street, and includes the name Ohio Industrial Trading Company. The relationship of the two companies is not known.

On March 19, 1996, an OEPA reconnaissance inspection of the site noted: two transformers, assumed to contain polychlorinated biphenyls (PCBs), standing inside the front gate; asbestos; approximately 10 drums marked "hydraulic oil"; and at least 15 propane cylinders, all located inside the brick building; and seven transformer carcasses in a sheltered portion of the partially demolished building. OEPA also observed two rooms on the north side of the partially demolished building that open to the outside. Inside one of these rooms were numerous drums, capacitors, and full asbestos disposal bags. The adjacent room contained a pitched tent and a makeshift fire/cooking area, indicating that someone may be living on site.

On March 20, 1996, OEPA sent a letter to the U.S. EPA Emergency Response Branch requesting assistance in conducting a removal action at the GHR Foundry Site. The OEPA information makes no mention of sampling or previous enforcement actions related to the site.

On May 9, 1996, OEPA issued an administrative complaint against the site owners, citing in particular six on-site underground storage tanks (USTs) with capacities from 2,000 to 20,000 gallons, that were formerly used to store kerosene, fuel oil, and "core" oil, which have long been out of use and are required to be removed. Also included in the complaint was the owners' failure to properly store, label, and dispose of numerous drums containing PCB oil.

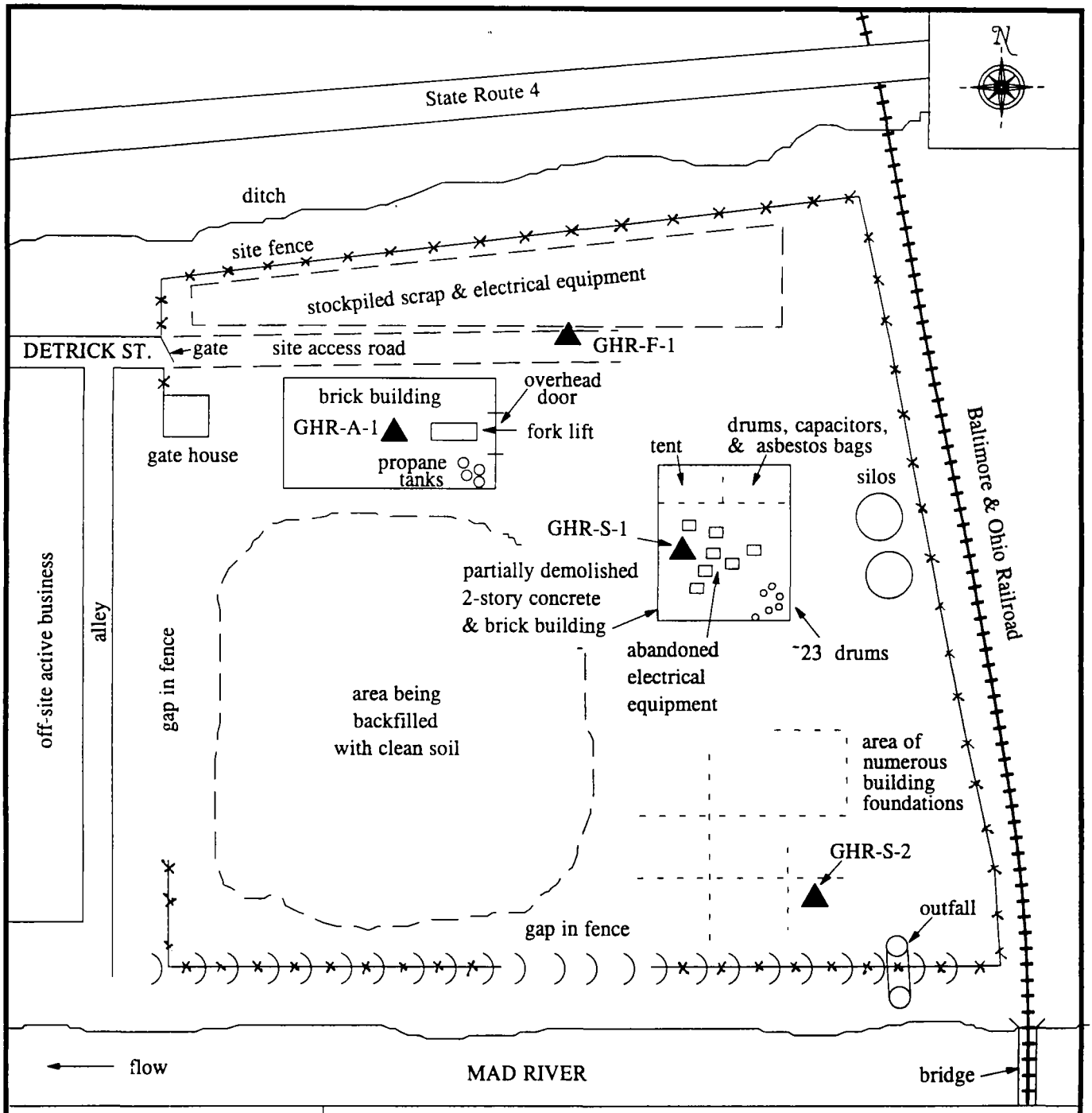
## 3. SITE ASSESSMENT

On April 10, 1996, U.S. EPA OSC Paul R. Steadman and START member Larry Lueck mobilized to conduct the site assessment. The OSC and START were later met and accompanied on the site by Christopher Cosgrave of the OEPA Division of Hazardous Waste Management. After reviewing the site safety plan, the OSC and START donned level C protection to conduct a site reconnaissance (Figure 3-1).

It was observed that the site was not secured; most of the west (front) fence was missing and the site gate was open. The site access road runs along the north side of the brick building, then turns southeast into the rest of the site. Along the north side of the access road, for most of the length of the site, large amounts of what appeared to be transite paneling, and numerous pieces of used equipment were stockpiled or staged. These materials included tanks, small refractory ovens or incinerators, several drums that appeared to contain oil, heavy equipment tires, and various large electrical devices.

An operator with a small bulldozer appeared to be leveling 20 or more truckloads of soil over the southwest portion of the site, and numerous additional loads were delivered to the site during the site assessment. In the early afternoon, the OSC and START encountered Bill Caldwell of Sunesis Construction Company (Sunesis) on site, who said Sunesis is widening a road in another part of Dayton and bringing clean fill to the GHR Foundry site at the site owner's request. The bulldozer and operator spreading the fill around the southwest portion of the site, as well as the trucks delivering the clean fill, all belonged to Sunesis.

Several groups of unauthorized scavengers, who were loading cars and pickups with site scrap, appeared to ignore the OSC and START, even when the OSC warned one group that being on this site could prove hazardous to their health. Shortly after U.S. EPA's arrival on site, one of the scavengers evidently tampered with an electrical cabinet standing partway in the access road near the rear end of the brick building, causing the cabinet to spew a thin but continuous stream of clear, amber-colored fluid onto the asphalt.




LEGEND

fence

railroad tracks

sample location ▲ GRH-X-X

old berm

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33 N. Dearborn Street, Chicago, Illinois 60602

| | |
|---|---|
| TITLE: Site Features and Sample Location Map | FIGURE #: 3-1 |
| SITE: GHR Foundry | SCALE: not to scale |
| CITY: Dayton STATE: Ohio | TDD: S05-9604-004 |
| SOURCE: Ecology & Environment, Inc. | DATE: 1996 REVISED: NA |

Numerous large electrical devices, approximately 24 drums, and other debris were observed and photographed under the second floor of the partially demolished building. Soil on the concrete floor around the drums and electrical equipment was black and greasy. Two silos were observed along the east site fence. The southeast portion of the site was primarily covered with old concrete floor slabs and the bases of old walls. Virtually the entire site was strewn with building debris and other waste, some of which was heaped into piles. At least five or six 2-gallon gasoline cans were standing among the rubble. The 24-inch cement outfall pipe, leading from the southeast corner of the site through the old southern berm to the steep riverbank, appeared to be largely plugged with soil, dead vegetation, and debris.

The OSC and START inspected the basement of the brick building, gaining access down a vehicle ramp and through an open garage door. Immediately inside was a forklift, in usable condition, and numerous metal gas cylinders assumed to contain propane for the forklift. Beyond these cylinders was additional stored equipment. The ceiling was coated with fluffy grayish-white material, possibly asbestos insulation, that was falling off in clumps and accumulating on the floor, where it was strewn about.

At approximately 1430 hours, the OSC and START revisited certain site areas with OEPA Environmental Specialist Christopher Cosgrave. In particular, Cosgrave pointed out the two bunker-like concrete rooms on the north side of the partially demolished building; one containing numerous drums with PCB labels, capacitors, and full asbestos disposal bags, the other with a tent pitched inside. Cosgrave had no knowledge of the contents or purpose of the two silos. According to Cosgrave, the site owner, John Peloquin, had previously told OEPA that he had drained all the PCB oil out of the electrical equipment, and that it was this PCB oil which is presently stored in drums in the partially demolished building.

After the site reconnaissance, START collected several site samples at the direction of the OSC. Sample GHR-F-1 was collected from the clear oily fluid still spewing from the electrical cabinet beside the access road. Soil samples GHR-S-1 and GHR-S-2 were collected from the floor near the stored electrical equipment in the partially demolished building, and from one of the old building slabs in the southeast corner of the site, respectively. Both soil samples were stained black and appeared oily compared to the surrounding soils. Sample GHR-A-1 consisted of a clump of the fluffy insulation collected from the floor of the brick building's basement, where it had fallen from the ceiling.

At approximately 1615 hours, OEPA, the OSC, and START all departed the site. On April

12, 1996, START delivered the iced samples to the Gabriel Environmental Services laboratory in Chicago, Illinois, for analysis under analytical TDD S05-9604-810.

# 4. ANALYTICAL RESULTS

The analytical results of the samples collected during the GHR Foundry site assessment are presented in Table 4-1. The oil sample and the two soil samples do not contain hazardous levels of PCBs. The ceiling insulation sample, at 25 to 30% Chrysotile asbestos, is above the 1% action level for asbestos, indicating a hazardous condition in the brick building. The validated laboratory reports and quality assurance/quality control memorandum are presented in Appendix B.

**Table 4-1**

**GHR Foundry Site**
**Dayton, Ohio**
**Sample Collection and Analytical Data**
**April 10, 1996**

| Sample Number | Time | Matrix | Parameter | Result |
|---|---|---|---|---|
| GHR-F-1 | 1430 | Fluid/oil | PCBs | 43.1 mg/kg |
| GHR-S-1 | 1440 | Soil | PCBs | 9.47 mg/kg |
| GHR-A-1 | 1445 | Ceiling insulation | Asbestos | 25-30% Chrysotile |
| GHR-S-2 | 1500 | Soil | PCBs | 3.59 mg/kg |

Key:
mg/kg = milligrams per kilogram.

**EPA U.S. EPA Region 5**
**EMERGENCY AND ENFORCEMENT RESPONSE BRANCH**

| | |
|---|---|
| TITLE ANALYTICAL DATA | FIGURE # TABLE 1 |
| SITE GHR FOUNDRY | SCALE |
| CITY DAYTON STATE OHIO | PAN |
| SOURCE STARTm for E & E | DATE 4/10/96 REVISED |

# 5. DISCUSSION OF POTENTIAL THREATS

## 5.1 THREAT TO HUMAN HEALTH AND THE ENVIRONMENT

Conditions present at the GHR Foundry site that warrant an appropriate removal action as set forth in paragraph (b) (2) of Section 300.415 of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) are:

i) **Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants.** The GHR Foundry site, with unrestricted access, is located within several blocks of a residential area. Scavengers and other unauthorized persons come and go at will throughout the site, as observed during the site assessment, and someone may be living on site, as suggested by the tent. Up to 40 drums and numerous large electrical devices may contain hazardous concentrations of PCBs above applicable regulatory levels. The result of 43.1 mg/kg of PCB (Arochlor 1260) from sample GHR-F-1 is typical of PCB concentrations remaining in electrical and hydraulic equipment after PCB oil has been flushed and replaced with pure mineral oil. While not hazardous in itself, this value is evidence that the fluid in this device may once have contained a higher concentration of PCBs. This tends to support site owner Peloquin's claim to OEPA that he had replaced PCB fluid in the on-site equipment with non-PCB oil and stored the PCB fluid in drums. Hazardous levels of asbestos exist at the unsecured site, as evidenced by the sample of insulation from the floor of the brick building. This asbestos-containing material is loose and available to be inhaled and lodged in the lungs of trespassers. Gas cylinders and fuel cans found on site may contain explosive or otherwise harmful substances.

ii) **Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release.** Evidence from the site assessment and conversations with OEPA officials indicate that hazardous substances are present on site. Up to 40 drums found on site, many of which bear PCB warning labels, are thought to contain hazardous material. Although most of the drums appeared to be in fair to good condition, entry by unauthorized persons onto the site poses a potential threat of release through vandalism or other tampering. Metal drums left exposed to the weather will deteriorate through corrosion. OEPA

informed the OSC that there are six USTs on site with capacities of 2,000 to 20,000 gallons formerly used to store kerosene, fuel oil, and core oil. The present contents and condition of these tanks are unknown. There are also numerous gas cyclinders of unknown contents on site that could emit harmful gases through tampering or deterioration.

iii) **Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released.** Freezing temperatures during winter months and high temperatures in summer could cause rupture or ignition of some of the containers at the site. Heavy rains could carry on-site contaminants off site through the outfall to the Mad River, or by sheet runoff to the ditch on the north of the site. Friable asbestos-containing material found on site may pose an inhalation hazard during summer months.

iv) **Threat of fire or explosion.** Up to 15 gas cylinders of unknown contents present in the brick building present a potential fire and explosion hazard if they contain propane. Up to six or more gasoline cans standing among combustible on-site debris also present a potential fire hazard.

Based on the analytical results and site conditions, mitigative actions are necessary at the GHR Foundry site to abate potential and imminent threats to human health and the environment posed by hazardous conditions present at the site.

## 6. PROPOSED REMOVAL ACTIONS

The preferred removal action to mitigate threats associated with the GHR Foundry site consists of off-site treatment and disposal of liquid/sludge and solid wastes, and abatement of asbestos-containing materials. The removal action is anticipated to require the following tasks:

1) Sampling of the contents of drums and electrical equipment for PCBs, flushing of any PCB-containing fluids that may remain in equipment, and off-site disposal of PCB liquids.

2) Removal of friable asbestos from the basement ceiling and floor of the brick building and anywhere else it may occur on site. Disposal of asbestos-containing materials and filled asbestos disposal bags at a permitted off-site facility.

3) Sampling of the contents of on-site gas cylinders and off site disposal of the cylinders.

The response actions described in this report directly address actual or threatened releases of hazardous substances, pollutants, or contaminants at the facility which may pose an imminent and substantial endangerment to public health and safety, and to the environment. There are approximately 40 drums and 15 or 20 large electrical devices on site, any or all of which may contain PCB liquids. There are approximately 20 to 30 stored bags that are labeled asbestos and may contain asbestos, and approximately 5,000 square feet of ceiling coated with asbestos insulation. There are approximately 15 cylinders on site that may contain hazardous gases.

If sampling and disposal of PCB liquids, asbestos abatement, and gas cylinder sampling and disposal can take place concurrently, the removal action at the GHR Foundry site could be completed in two weeks and the cost is estimated at approximately $128,153.00 (Appendix C). If PCB liquids, asbestos, and gas cylinders have to be removed sequentially, the removal could take up to four weeks and cost more.

# APPENDIX A

# PHOTODOCUMENTATION

SITE NAME GHR FOUNDRY
TDD #: S05-9604-004
DATE: APRIL 10 1996
TIME: 1115
DIRECTION: E
PHOTOGRAPHER LARRY LUECK

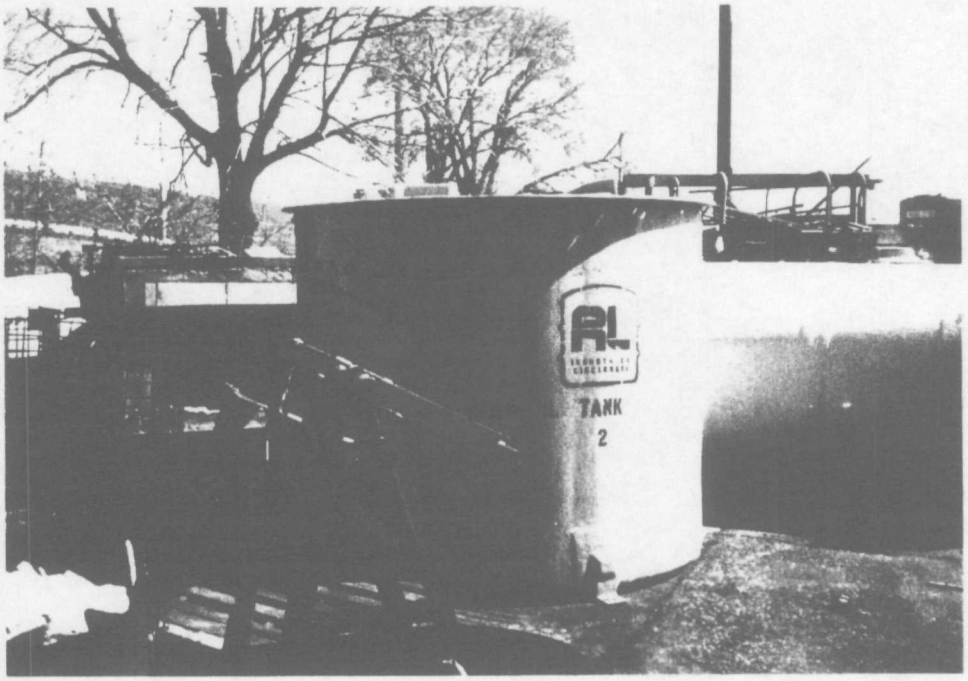
SUBJECT: Site front gate access road and guard shack (r)

SITE NAME GHR FOUNDRY
TDD # S05-9604-004
DATE APRIL 10 1996
TIME 1120
DIRECTION WNW
PHOTOGRAPHER LARRY LUECK

SUBJECT: Stacks of probable transite; expressway (r); front site fence in background; access road (l)

| | |
|---|---|
| SITE NAME | GHR FOUNDRY |
| TDD # | S05-9604-004 |
| DATE | APRIL 10 1996 |
| TIME | 1115 |
| DIRECTION | SE to S |
| PHOTOGRAPHER | LARRY LUECK |

SUBJECT Dozer leveling recently delivered fill dirt in southwest quadrant of site

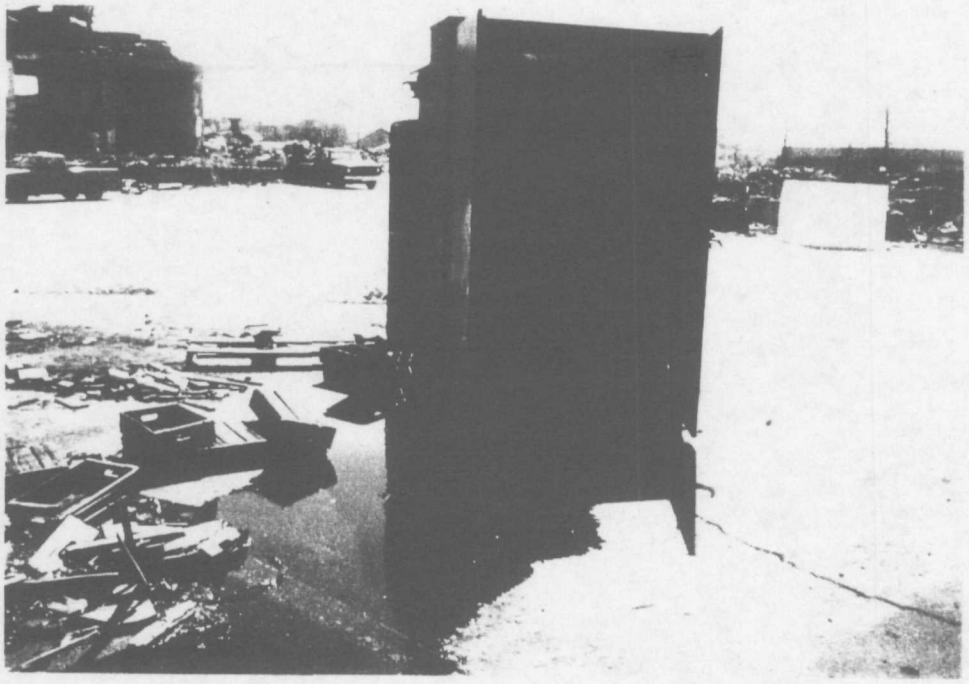



SITE NAME: GHR FOUNDRY
TDD #: S05-9604-004
DATE: APRIL 10 1996
TIME: 1120
DIRECTION: NE
PHOTOGRAPHER: LARRY LUECK

SUBJECT: Staged tanks, small refractory oven, and miscellaneous equipment on north side of site access road

SITE NAME: GHR FOUNDRY
TDD #: S05-9604-004
DATE: APRIL 10 1996
TIME: 1120
DIRECTION: E
PHOTOGRAPHER: LARRY LUECK

SUBJECT Staged electrical equipment along site access road; partially demolished site building in background.

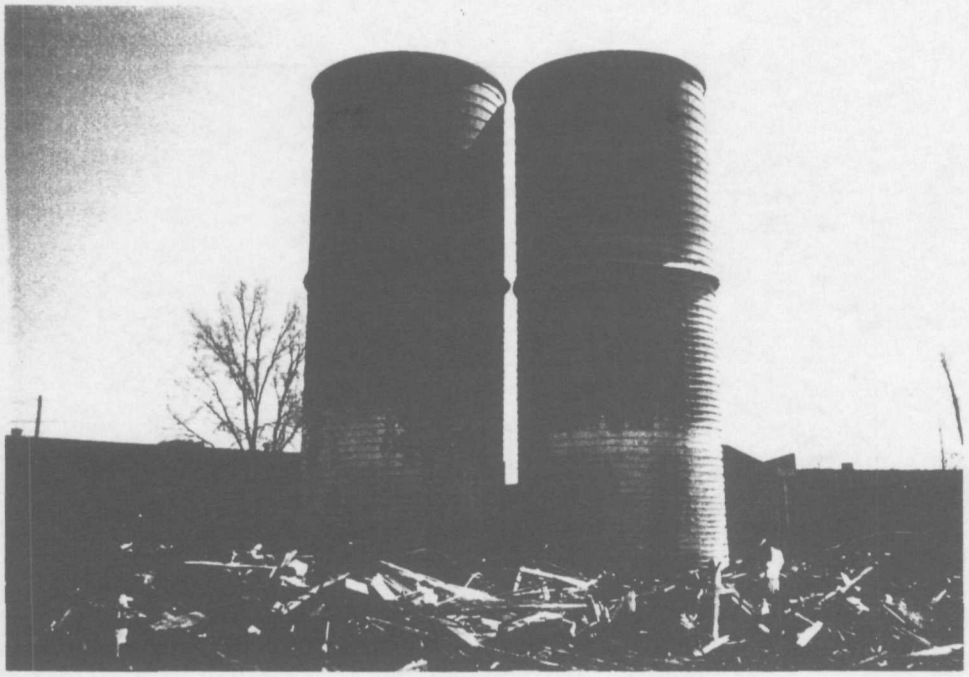


SITE NAME: GHR FOUNDRY
TDD #: S05-9604-004
DATE: APRIL 10 1996
TIME: 1130
DIRECTION: SE
PHOTOGRAPHER: LARRY LUECK

SUBJECT: Electrical cabinet spewing clear oily liquid

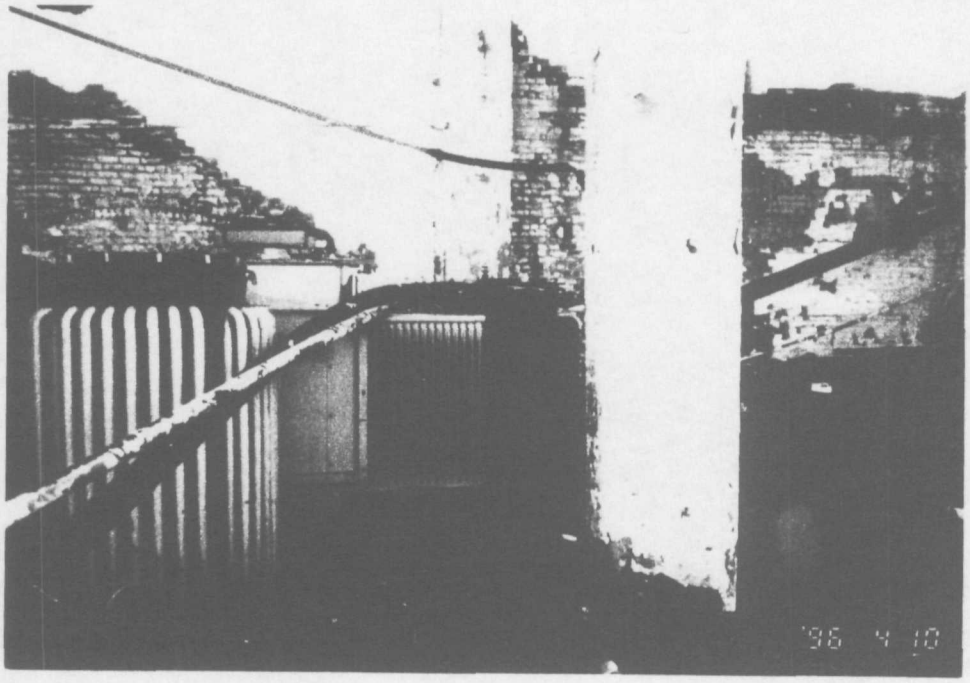
SITE NAME: GHR FOUNDRY
TDD #: S05-9604-004
DATE: APRIL 10 1996
TIME: 1135
DIRECTION: ENE
PHOTOGRAPHER: LARRY LUECK

SUBJECT: Electrical equipment stored in in partially demolished site building



SITE NAME: GHR FOUNDRY
TDD #: S05-9604-004
DATE: APRIL 10 1996
TIME: 1140
DIRECTION: E
PHOTOGRAPHER LARRY LUECK

SUBJECT: Silos of unknown purpose and contents located along eastern site boundary.

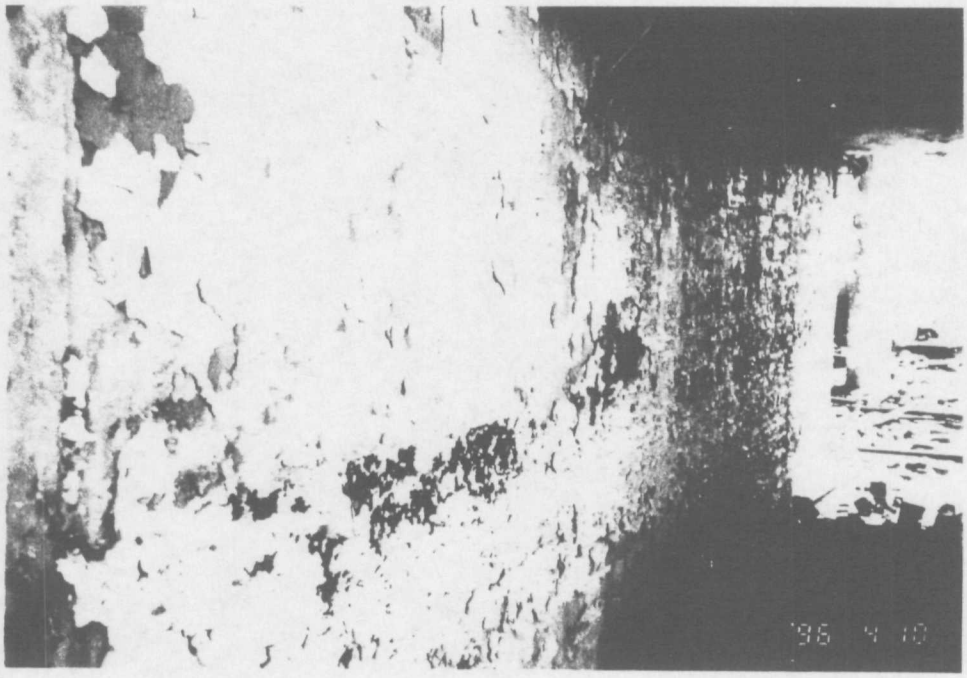



SITE NAME: GHR FOUNDRY
TDD #: S05-9604-004
DATE: APRIL 10 1996
TIME: 1330
DIRECTION: E
PHOTOGRAPHER LARRY LUECK

SUBJECT Old electrical equipment stored in partially demolished site building.

SITE NAME GHR FOUNDRY
TDD #: S05-9604-004
DATE: APRIL 10 1996
TIME: 1345
DIRECTION SSW
PHOTOGRAPHER LARRY LUECK

SUBJECT: OSC and OEPA official on rubble outside partially demolished site building; room with tent (r), room with drums, capacitors and asbestos bags (l)




SITE NAME GHR FOUNDRY
TDD #: S05-9604-004
DATE: APRIL 10 1996
TIME: 1347
DIRECTION S
PHOTOGRAPHER LARRY LUECK

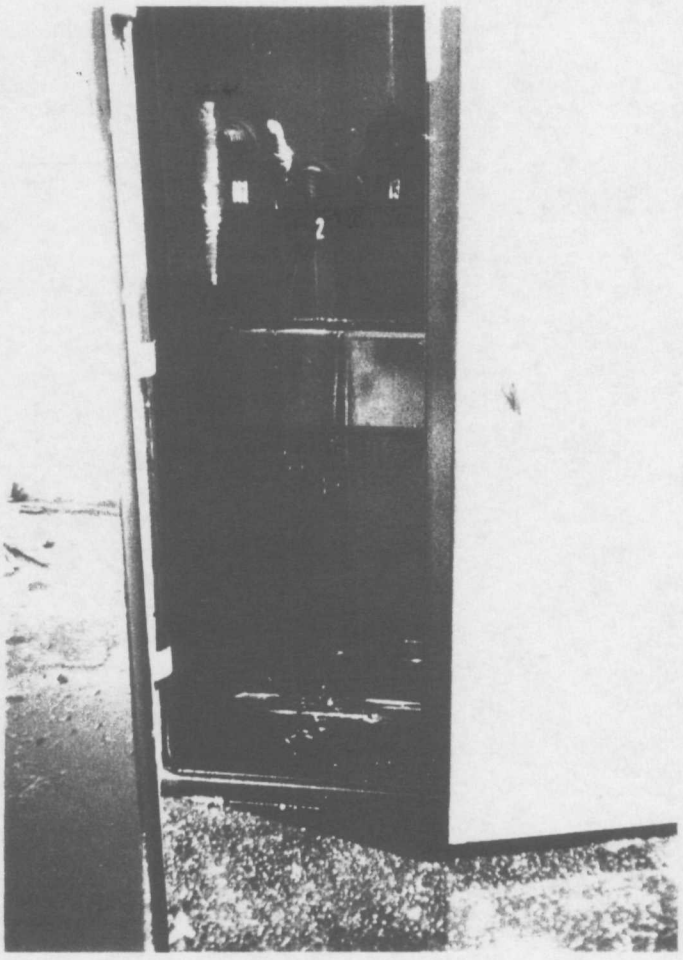
SUBJECT: Pealing paint on interior wall of partially demolished site building

SITE NAME: GHR FOUNDRY
TDD #: S05-9604-004
DATE: APRIL 10 1996
TIME: 1358
DIRECTION: SE
PHOTOGRAPHER: LARRY LUECK

SUBJECT: Partially demolished site building and other site building rubble

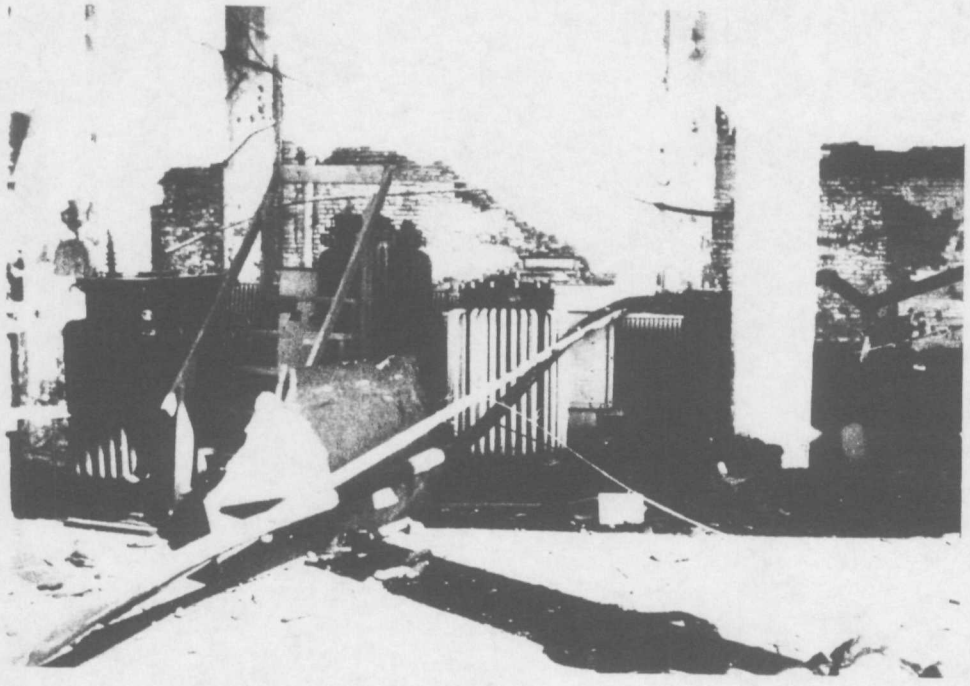
SITE NAME: GHR FOUNDRY
TDD #: S05-9604-004
DATE: APRIL 10 1996
TIME: 1358
DIRECTION: WEST
PHOTOGRAPHER: LARRY LUECK

SUBJECT: Unauthorized scavengers removing staged equipment from along site access road: leaking electrical cabinet (r)



SITE NAME GHR FOUNDRY
TDD #: S05-9604-004
DATE: APRIL 10, 1996
TIME: 1430
DIRECTION SE
PHOTOGRAPHER LARRY CUECK

SUBJECT Electrical cabinet spewing clear oily liquid

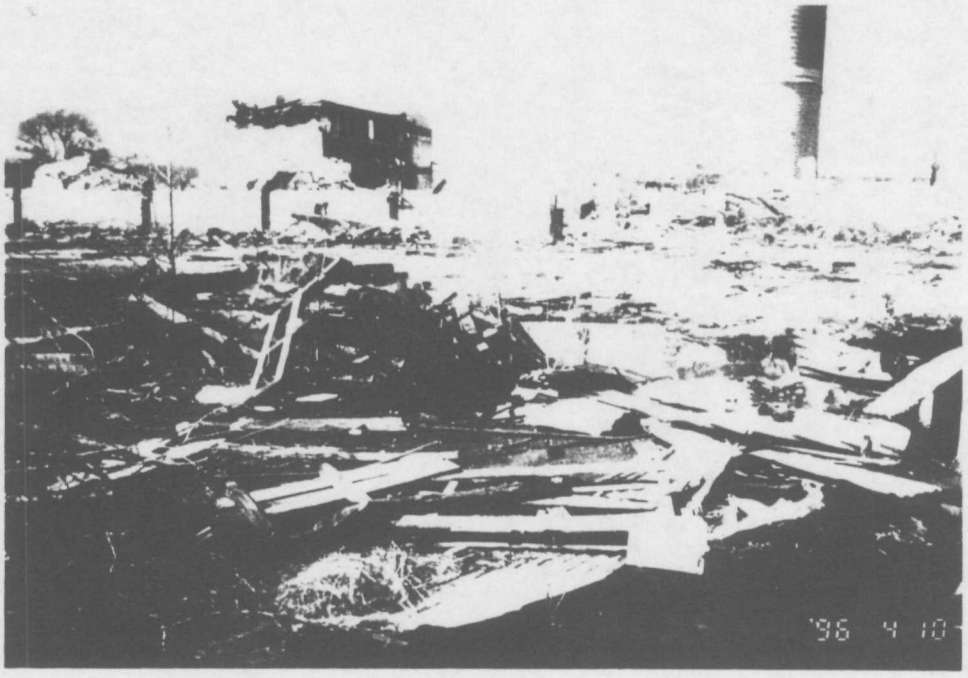


SITE NAME GHR FOUNDRY
TDD # S05-9604-004
DATE: APRIL 10, 1996
DIRECTION NE
PHOTOGRAPHER LARRY CUECK

SUBJECT Soil sample location GHR-S-1 (to left of placard) perspective


SITE NAME: GHR FOUNDRY
TDD #: S05-9604-004
DATE: APRIL 10, 1996
TIME: 1445
DIRECTION: SW
PHOTOGRAPHER: LARRY LUECK

SUBJECT: Insulation sample GHR-A-1, inside brick site builing.




SITE NAME: GHR FOUNDRY
TDD #: S05-9604-004
DATE: APRIL 10, 1996
TIME: 1500
DIRECTION: N
PHOTOGRAPHER: LARRY LUECK

SUBJECT: Soil sample GHR-S-2 (in front of placard), perspective; on-site silos and partially demolished site building in background.

SITE NAME: GHR FOUNDRY
TDD #: 505-9604-004
DATE: APRIL 10, 1996
TIME: 1505
DIRECTION: N (r) to W
PHOTOGRAPHER: LARRY LUECK

SUBJECT: North to west panorama of site photographed from southeast corner of site.

START RESPONSE TO OSC COMMENTS
AUGUST 1996

TDD Name: GHR Foundry Site
TDD: S05-9604-004A
PAN: 6A0401SI
U.S. EPA Project Manager: Steadman
Contractor Project Manager: Lueck

OSC Comment(s):

(1) OSC commented inadequate site assessment due to the START Manager being ill-prepared to conduct sampling sufficient to identify risk.

Contractor Response(s):

(1) This site inspection was assigned to a START member on an existing site that was expecting to travel to the area for a nearby PRP oversight. This was done due to having only 2 days prior notice and in order to provide cost savings to the U.S. EPA in travel and mobilization. The START project manager discussed the assessment needs with the OSC prior to conducting the assessment. Upon arriving at the site, START and the OSC agreed on sampling locations based on available access to areas of concern. The START Site Assessment Report identified 20 to 30 bags labelled as containing asbestos material and collected a sample of ceiling insulation with 25-30% Chrysotile asbestos. This asbestos sample result is above the 1% action level used for removal actions and was identified by START in the report.

# APPENDIX B

# ANALYTICAL RESULTS

**ecology and environment, inc.**
International Specialists in the Environment

111 West Jackson Boulevard
Chicago, Illinois 60604
Tel: (312) 663-9415, Fax: (312) 663-0791

M E M O R A N D U M

DATE: June 14, 1996

TO: Larry Lueck, START Project Manager, E & E, Chicago, Illinois

FROM: David Hendren, START Analytical Services Manager, E & E, Chicago, Illinois

THROUGH: Mary Jane Ripp, Assistant START Program Manager, E & E, Chicago, Illinois

SUBJECT: Data Quality Review for Polychlorinated Biphenyls (PCBs), GHR Foundry, Dayton, Montgomery County, Ohio

REFERENCE: Project TDD S05-9604-004 Analytical TDD S05-9604-810
Project PAN 6A0401SIXX Analytical PAN 6AAJ01TA

The data quality assurance (QA) review of one oil and two soil samples collected from the GHR Foundry site is complete. The samples were collected on April 10, 1996, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The samples were submitted to Gabriel Laboratories, Inc., Chicago, Illinois, for analyses. The laboratory analyses were performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste method 8081.

Sample Identification

| START Identification No. | Laboratory Identification No. |
|---|---|
| GHR-F-1 | C604143-01A |
| GHR-S-1 | C604143-02A |
| GHR-S-2 | C604143-04A |

Data Qualifications:

I. Sample Holding Time: Acceptable

The samples were collected on April 10, 1996, extracted on April 15, 1996, and analyzed between April 19 and 22, 1996.

Sample GHR-F-1 was extracted on April 12, 1996, and analyzed on April 15, 1996. This is within the 14-day holding time limit, from collection to extraction, and 40-day limit from extraction to analysis.

II. Instrument Performance: Acceptable

The chromatographic resolution was adequate in the standard and sample chromatograms. Surrogate retention times were consistent in samples and standards.

III. Calibrations:

• Initial Calibration: Acceptable

A five-point initial calibration was performed prior to analysis. The percent relative standard deviations (%RSDs) between response factors were less than 20% for all PCBs.

• Continuing Calibration: Acceptable

The percent differences of the response factors were less than 15%, as required.

IV. Blank: Acceptable

A method blank was analyzed with the sample. No target compounds or contaminants were detected in the blank.

V. Compound Identification: Acceptable

The chromatograms of PCBs identified in the samples matched those of the standards.

VI. Additional QC Checks: Acceptable

The recoveries of the surrogates used in the sample were within acceptable laboratory limits.

VII. Overall Assessment of Data for Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990), Data Validation Procedures, Section 7.0, PCBs. Based upon the information provided, the data are acceptable for use.

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| | | | |
|---|---|---|---|
| Sample Description: | **GHR-F-1 TRANSFORMER FLUID** | Sample No.: | **C604143-01** |
| Sample Date: | **04/10/96** | Date Received: | **04/12/96** |
| Collected By: | **CLIENT PERSONNEL** | Matrix: | **OIL** |
| Test Description: | **PCB's** | Method: | **SW 846 808** |

| PARAMETER | RESULT | PQL |
|---|---|---|
| Arochlor-1016 | < DL | 2.0 |
| Arochlor-1221 | < DL | 2.0 |
| Arochlor-1232 | < DL | 2.0 |
| Arochlor-1242 | < DL | 2.0 |
| Arochlor-1248 | < DL | 2.0 |
| Arochlor-1254 | < DL | 2.0 |
| Arochlor-1260 | 43.1 | 2.0 |

COMMENTS:

| | | | |
|---|---|---|---|
| EXTRACTED | 04/12/96 | UNITS | mg/Kg |
| DATE RUN | 04/15/96 | ANALYST | TJU |

DATA RELEASE AUTHORIZED BY: _____ DATE: 4-15-96

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| | | | |
|---|---|---|---|
| Sample Description: | **GHR-S-1 DEMOLISHED BLDG** | Sample No.: | **C604143-02** |
| Sample Date: | **04/10/96** | Date Received: | **04/12/96** |
| Collected By: | **CLIENT PERSONNEL** | Matrix: | **SOIL** |
| Test Description: | **PCB's** | Method: | **SW 846 808** |

| PARAMETER | RESULT | PQL |
|---|---|---|
| Arochlor-1016 | < DL | 0.66 |
| Arochlor-1221 | < DL | 0.66 |
| Arochlor-1232 | < DL | 0.66 |
| Arochlor-1242 | < DL | 0.66 |
| Arochlor-1248 | 7.75 | 0.66 |
| Arochlor-1254 | 1.72 | 0.66 |
| Arochlor-1260 | < DL | 0.66 |

COMMENTS: Please note: 1248 and 1254 are flagged (J) due to co-elution times. Due to sample matrix surrogates were diluted out.

| | | | |
|---|---|---|---|
| EXTRACTED | 04/15/96 | UNITS | mg/Kg |
| DATE RUN | 04/19/96 | ANALYST | TJU |

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| | | | |
|---|---|---|---|
| Sample Description: | **GHR-S-2 SE SLAB** | Sample No.: | **C604143-04** |
| Sample Date: | **04/10/96** | Date Received: | **04/12/96** |
| Collected By: | **CLIENT PERSONNEL** | Matrix: | **SOIL** |
| Test Description: | **PCB's** | Method: | **SW 846 808** |

| PARAMETER | RESULT | PQL |
|---|---|---|
| Arochlor-1016 | < DL | 0.66 |
| Arochlor-1221 | < DL | 0.66 |
| Arochlor-1232 | < DL | 0.66 |
| Arochlor-1242 | < DL | 0.66 |
| Arochlor-1248 | 1.75 | 0.66 |
| Arochlor-1254 | 1.84 | 0.66 |
| Arochlor-1260 | < DL | 0.66 |

COMMENTS: Please note: 1248 and 1254 are flagged (J) due to co-elution times. Surrogates were diluted out due to sample matrix.

| | | | |
|---|---|---|---|
| EXTRACTED | 04/15/96 | UNITS | mg/Kg |
| DATE RUN | 04/19/96 | ANALYST | TJU |

DATA RELEASE AUTHORIZED BY: _____ DATE: 4-24-96

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ecology and environment, inc.
International Specialists in the Environment

33 North Dearborn Street
Chicago, Illinois 60602
Tel. 312/578-9243, Fax: 312/578-9345

M E M O R A N D U M

DATE: June 14, 1996

TO: Larry Lueck, START Project Manager, E & E, Chicago, Illinois

FROM: David Hendren, START Analytical Services Manager, E & E, Chicago, Illinois

THROUGH: Mary Jane Ripp, Assistant START Program Manager, E & E, Chicago, Illinois

SUBJECT: Generic Data Quality Review for Asbestos Using Polarized Light Microscopy, GHR Foundry, Dayton, Montgomery County, Ohio

REFERENCE: Project TDD S05-9604-004 Analytical TDD S05-9604-810
Project PAN 6A0401SIXX Analytical PAN 6AAJ01TA

The data quality assurance (QA) review of one solid sample collected from the GHR Foundry site is complete. The sample was collected on April 10, 1996, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The sample was submitted to Gabriel Laboratories, Inc., Chicago, Illinois, for analysis. The laboratory analysis was performed according to the United States Environmental Protection Agency (U.S. EPA) Method 600/M4-82-020.

Sample Identification

| START Identification No. | Laboratory Identification No. |
|---|---|
| GHR-A-1 | C604143-03A |

Data Qualifications:

I. Sample Holding Time: Acceptable

The sample was collected on April 10, 1996, and analyzed on April 18, 1996. The Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4 does not provide holding time criteria for this parameter.

II. Overall Assessment of Data for Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the OSWER Directive 9360.4-01 (April 1990), Data Validation Procedures, Section 9.0, Generic Data Validation Procedures. Based upon the information provided, the data are acceptable for use.

GHR FOUNDRY SITE
DAYTON, OHIO
SAMPLE COLLECTION & ANALYTICAL DATA
All samples collected on October 15, 1996

| Sample Number | Time | Matrix | Analyzed For | Result | | |
|---|---|---|---|---|---|---|
| GHR-F-2 | 1715 | fluid/oil (honey - colored) | PCBs | Total PCBs | BD | |
| | | | VOCs | o-Xylene | 30,000 | ug/Kg |
| | | | | m,p-ylenes | 9,500 | ug/Kg |
| GHR-F-3 | 1725 | fluid/oil (black) | PCBs | Total PCBs | BD | |
| | | | VOCs | Ethyl Benzene | 14,000 | ug/Kg |
| | | | | Toluene | 5,000 | ug/Kg |
| | | | | o-Xylene | 20,000 | ug/Kg |
| | | | | m,p-Xylene | 57,000 | ug/Kg |
| GHR-F-4 | 1735 | fluid/oil (clear) | PCBs | Total PCBs | BD | |
| | | | VOCs | Ethyl Benzene | 140,000 | ug/Kg |
| | | | | Toluene | 94,000 | ug/Kg |
| | | | | o-Xylene | 750,000 | ug/Kg |
| | | | | m,p-Xylene | 750,000 | ug/Kg |

Notes: BD = Below Detection (at various PQLs)
Compunds Not Listed = BD

Source: National Environmental Testing, Inc.

EPA U.S. EPA Region 5
EMERGENCY AND ENFORCEMENT RESPONSE BRANCH

| | |
|---|---|
| SAMPLE COLLECTION DATA | TABLE 2 |
| TITLE: GHR FOUNDRY | FIGURE #: N/A |
| SITE: DAYTON OHIO (CITY / STATE) | SCALE: N/A |
| U.S. EPA - REG. V | PAN: 10/15/96 |
| SOURCE | DATE |
| | REVISED |

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**BULK ASBESTOS SURVEY REPORT**

**DATE ANALYZED:** 04/18/96

**Sample Description: GHR-A-1 BRICK BLDG** **Date Collected: 04/10/96**
**Gabriel Log Number: C604143-03A** **Date Received: 04/12/96**

| ASBESTIFORM MATERIAL PRESENT | | NON-ASBESTOS MATERIAL PRESENT | |
|---|---|---|---|
| Chrysotile | 25-30 % | Cellulose | ND % |
| Amosite | ND % | Fibrous Glass | 40-45 % |
| Crocidolite | ND % | Synthetic Polymer | ND % |
| Anthophyllite | ND % | Binding Material | 20-25 % |
| Actinolite | ND % | Other | ND % |
| Tremolite | ND % | | |

Total % Asbestos 30 %

(1) Samples were collected by client personnel.
(2) Analyses were performed using polarized light microscopy in accordance with the EPA Interim Method for the determination of asbestos in bulk insulation samples; EPA-600/M4-82-020.
(3) Samples will be retained for a minimum of 90 days unless notified by client.
(4) Analyses reflects only the materials tested.
(5) ND = Asbestos not detected in sample - limit of detection of analysis is 1 percent.

Analyzed by: Ramon Gruk Date: 4/18/96 Approved: DP

# APPENDIX C

# RCMS REMOVAL COST ESTIMATE

Cost Summary



Projection Name: GHR Foundry
Projection Type: Initial

Date: 08/16/96
Prime Contractor: RES5

| | | Projection | Archive | Total |
|---|---|---|---|---|
| CONTRACTOR | | | | |
| | Personnel Cost | 22558 | 0 | 22558 |
| | Equipment Cost | 6052 | 0 | 6052 |
| | Other Direct Cost | 46293 | 0 | 46293 |
| | Total for Contractor | 74903 | 0 | 74903 |
| | Contractor Contingency:10.00% | | | 7490 |
| | Including Contractor Contingency | | | 82393 |
| | Site Contingency:15.00% | | | 11235 |
| | Including Site Contingency | | | 93629 |
| GOVERNMENT | | | | |
| | Personnel Cost | 24475 | 0 | 24475 |
| | Equipment Cost | 0 | 0 | 0 |
| | Other Direct Cost | 5546 | 0 | 5546 |
| | Total for Goverment | 30021 | 0 | 30021 |
| | Site Contingency: 15.00% | | | 4503 |
| | Including Site Contingency | | | 34524 |
| PROJECT TOTAL | | | | 128153 |

CONTRACTOR EQUIPMENT BY CLIN,
CONTRACTOR OTHER DIRECT COSTS (ODC),
GOVERNMENT OTHER DIRECT COSTS,
CONTRACTOR PERSONNEL BY CLIN,
GOVERNMENT PERSONNEL BY CLIN

AUGUST 1996
5 PAGES

HAS BEEN REDACTED

NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION